United States Patent and Trademark Office

11.8

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Tradémark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

DATE MAILED: 11/02/2006

APPLICATION NO.	FILI	NG DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
10/517,685	12/	10/2004	Robert C Fitzer	57894US004 3074	
32692	7590	11/02/2006		EXAMINER	
3M INNOV	ATIVE P	ROPERTIES CO	REIS, TRAVIS M		
PO BOX 33427 ST. PAUL, MN 55133-3427				ART UNIT	PAPER NUMBER
51.17tOE, 1	1.17(OL), WIN 33133 3 127			2859	

Please find below and/or attached an Office communication concerning this application or proceeding.

· · · · · · · · · · · · · · · · · · ·		Application No.	Applicant(s)					
		10/517,685	FITZER ET AL.					
	Office Action Summary	Examiner	Art Unit					
		Travis M. Reis	2859					
	The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply							
WHIC - Exter after - If NO - Failu Any r	ORTENED STATUTORY PERIOD FOR REPLY CHEVER IS LONGER, FROM THE MAILING DATE is in a sound of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. Period for reply is specified above, the maximum statutory period were to reply within the set or extended period for reply will, by statute, eply received by the Office later than three months after the mailing and patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim vill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	lely filed the mailing date of this communication. D (35 U.S.C. § 133).					
Status								
2a)⊠	Responsive to communication(s) filed on <u>21 Au</u> This action is FINAL . 2b) This Since this application is in condition for allowar closed in accordance with the practice under E	action is non-final. nce except for formal matters, pro						
Dispositi	on of Claims	•						
5)□ 6)⊠ 7)⊠	Claim(s) <u>1-8,10-30 and 34-48</u> is/are pending in 4a) Of the above claim(s) <u>8,15-17,19-30,34-36</u> , Claim(s) is/are allowed. Claim(s) <u>1-7,10-14,18,37-39,43,45 and 46</u> is/arc Claim(s) <u>40</u> is/are objected to. Claim(s) are subject to restriction and/or	41,42,44,47 and 48 is/are withdra	awn from consideration.					
Applicati	on Papers							
10) 🗌	The specification is objected to by the Examine. The drawing(s) filed on is/are: a) acce Applicant may not request that any objection to the o Replacement drawing sheet(s) including the correct The oath or declaration is objected to by the Ex	epted or b) objected to by the Eddrawing(s) be held in abeyance. See ion is required if the drawing(s) is obj	e 37 CFR 1.85(a). ected to. See 37 CFR 1.121(d).					
Priority u	inder 35 U.S.C. § 119							
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 								
Attachmen	t(s)							
1) Notic 2) Notic 3) Inform	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO/SB/08) r No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:	ite					

Application/Control Number: 10/517,685 Page 2

Art Unit: 2859

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 2. Claims 1-4, 6, 9, 10, 18, 31, 38, & 43 are rejected under 35 U.S.C. 102(b) as being anticipated by Boardman (U.S. Patent 3782204).

Boardman discloses a shock indicator (Figure 1) and method of manufacturing comprising providing a base (31) having a first side and a second side; an indicator (11) comprising a primary solid elastomeric plastic impingement object (25) of a large size, a solid material agglomerated powder (57)(col. 4 lines 6-11) coated over said impingement object of a color and differently colored surface modified panels (19) (col. 3 lines 9-10) of smaller sizes arranged in a first configuration when the shock indicator is in a first state prior to a shock event, and in a second configuration with dispersed powder in a second state following a shock event from any direction providing a visual contrast (Figure 4); and mechanical means (37) associated with the second side of the base for attachment of the shock indicator to a surface (Figure 1).

Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 11-14, 37, 45, & 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boardman.

Application/Control Number: 10/517,685

Art Unit: 2859

With reference to claim 11, Boardman discloses all of the instant claimed invention as stated above in the rejection of claims 1-4, 6, 9, 10, 18, 31, 38, & 43, but does not disclose the indicator comprises power particles and a liquid.

Boardman discloses a second embodiment wherein the indicator comprises a mixture of caster oil, glycerine, and carbon black powder (col. 4 lines 15-17). Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention was made to add the liquid caster oil and glycerine disclosed by Boardman in the second embodiment to the agglomerate powder disclosed by Boardman in the first embodiment in order to provide a more permanent indication of shock.

With reference to claim 12, Boardman discloses mineral oil (col. 4 line 15) and that other types of printing media are usable.

Boardman does not disclose the powder is a clay. However, the particular type of material used to make the powder, absent any criticality, is only considered to be the use of a "preferred or "or optimum" material out of a plurality of well known materials that a person having ordinary skill in the art at the time the invention was made would have find obvious to provide using routine experimentation based, among other things, on the intended use of Applicant's apparatus, i.e., suitability for the intended use of Applicant's apparatus, and since the courts have stated that a selection of a material on the basis of suitability for intended use of an apparatus would be entirely obvious. See In re Leshin, 125 USPQ 416 (CCPA 1960).

Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention was made to make the solid a clay in order to set up a particular predetermined acceleration indication.

With reference to claims 13 & 14, Boardman discloses mineral oil (col. 4 line 15) and that other types of printing media are usable.

Art Unit: 2859

Boardman does not disclose the powder is a clay filler. However, the particular type of material used to make the powder, absent any criticality, is only considered to be the use of a "preferred" or "optimum" material out of a plurality of well known materials that a person having ordinary skill in the art at the time the invention was made would have find obvious to provide using routine experimentation based, among other things, on the intended use of Applicant's apparatus, i.e., suitability for the intended use of Applicant's apparatus, and since the courts have stated that a selection of a material on the basis of suitability for intended use of an apparatus would be entirely obvious. See In re Leshin, 125 USPQ 416 (CCPA 1960). Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention was made to make the powder a clay filler in order to set up a particular predetermined acceleration indication.

Boardman does not disclose the liquid at 23° C has a surface tension within the range from about 10×10^{-3} N/m to about 80×10^{-3} N/m a density from about 0.5 to about 2grams/cm^3 , and a zero rate shear viscosity from about 1×10^{-3} to about 1×10^6 Pa-s. However, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to provide a surface tension within the range from about 10×10^{-3} N/m to about 80×10^{-3} N/m a density from about 0.5 to about 2grams/cm^3 , and a zero rate shear viscosity from about 1×10^{-3} to about 1×10^6 Pa-s, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the "optimum range" involves only routine skill in the art. *In re Aller*, 105 USPQ 233. Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention was made to make the liquid have a surface tension within the range from about 10×10^{-3} N/m to about 80×10^{-3} N/m a density from about 0.5 to about 2 grams/cm^3 , and a zero rate shear viscosity from about 1×10^{-3} to about 1×10^6 Pa-s in order to set up a particular predetermined acceleration indication.

Application/Control Number: 10/517,685

Art Unit: 2859

With reference to claims 37 & 46, Boardman discloses all of the instant claimed invention as stated above in the rejection of claims 1-4, 6, 9,10, 18, 31, 38, & 43, including the shock indicator can be associated with shipping goods (col. 1 lines 10-11).

Boardman does not disclose the goods are cellular telephones, personal digital assistants, hand held computers, and digital cameras. However, it has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ2d 1647 (1987). Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention was made to apply the shock indicator to these devices in order to determine whether they have been damaged if dropped.

With reference to claim 45, Boardman does not disclose a placing a plurality of indicators on the first side of said base. However, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to provide a plurality of indicators, since it has been held that the mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8. Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention was made to add additional shock indicators in order to determine the extent of a shock event.

5. Claims 5 & 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boardman in view of Rubey (U.S. Patent 4239014).

Boardman discloses all of the instant claimed invention as stated above in the rejection of claims 1-4, 6, 9, 10, 18, 31, 38, & 43, but does not disclose the panels are transparent.

Rubey discloses a shock detector (11) with a transparent container (15) to allow for visual detection of a shock event (Figure 1). Therefore, it would have been obvious to one with

ordinary skill in the art at the time of the invention was made to make the panels disclosed by Boardman transparent as taught by Rubey in order that detection of a shock event will be discerned faster than opening and removing the indicator, and allow unaffected shock detectors to remain untouched.

6. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Boardman in view of Duncan (U.S. Patent 6663679).

Boardman discloses all of the instant claimed invention as stated above in the rejection of claims 1-4, 6, 9, 10, 18, 31, 38, & 43, but does not disclose the shock indicator further comprise means to indicate exposure to wetness.

Duncan discloses a high intensity non reversing humidity indicator (Figures 1-2) which provides indication of wetness and humidity when employed in order to indicate a possible corrosive environment (col. 6 lines 35-51). Therefore, it would have been obvious to one with ordinary skill in the art at the time of the invention was made to add the indicator disclosed by Duncan to the shock indicator disclosed by Boardman (i.e. through the mechanical means 37 to aid in attachment) in order to monitor for a corrosive environment.

Allowable Subject Matter

- 7. Claim 40 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
- 8. The following is a statement of reasons for the indication of allowable subject matter:

With reference to claim 40, the prior art of record does not disclose or clearly suggest a method for the manufacture of a shock indicator comprising depositing a slurry in association with the first side and thereafter drying the slurry, in combination with the remaining limitations in the claims.

Response to Arguments

9. In response to applicant's arguments that Boardman does not disclose a shock indicator comprising an agglomerated powder; these arguments have been fully considered but they are not persuasive since there is an agglomerated powder coating the sphere, as detailed above in paragraph 2.

Conclusion

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Travis M. Reis whose telephone number is (571) 272-2249. The examiner can normally be reached on 8--5 M--F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diego Gutierrez can be reached on (571) 272-2245. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Travis M Reis Examiner Art Unit 2859 Diego Gutierrez Supervisory Patent Examiner Tech Center 2800

tmr October 19, 2006